July 2, 1957

Dear Bernie: Barr

We have found the following medium the most satisfactory for the growth of L colonies of E. coli K-12 substrains: (per l/)

N-Z-Case	10	
glucose	1	penicillin 1000 u/ml (sic). *
meat extract	10	
sucrose	100	
$MgSO_4 \cdot 7H_2O$	2*(add after autoclaving the rest of the medium)	
NaCl	3.5	

We have found the results of substituting components to be quite unpredictable, and variable with different cultures.

There is a remarkable variation in eop with different strains, genotypically related cultures often giving very diverse results. Most of our work has been with Y-10; however, the wild-type W strains should be ok.

I am trying to write up a paper on this before leaving for Australia. Enclosed are some pictures. Miss St. ~~Clair~~ Clair has started some thin sections on L colonies in agar blocks, but has had some trouble getting good fixation. This is precisely the project I am leaving with her this summer — there would be no harm in your communicating directly with her in my absence. (She is Jacqueline St. ~~Clair~~ Clair, and is a (non-student) research assistant.)

I'm afraid the DAP ration in your 'monkey-suit' wouldn't be enough, and I wouldn't want to appear as a protoplast myself.

That reminds me that I'm still puzzled how you isolated your first lysine-DAP culture: how had you contrived to furnish its DAP requirement?

m Have a good summer, all of you.

Yours,

Joshua Lederberg